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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
|---|-------------|-----------------------|----------------------------|------------------|
| 10/049,164  | 10/21/2002  | Matthew P. Patricelli | 063391-0202                | 6075             |
| 30542   | 7590        | 05/03/2005            |                            |                  |
| FOLEY & LARDNER<br>P.O. BOX 80278<br>SAN DIEGO, CA 92138-0278 |             |                       | EXAMINER<br>CEPERLEY, MARY |                  |
|   |             |                       | ART UNIT                   | PAPER NUMBER     |
|   |             |                       | 1641                       |                  |

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/049,164

**Applicant(s)**

PATRICELLI, MATTHEW P.

**Examiner**

Mary (Molly) E. Ceperley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-37 is/are pending in the application.
- 4a) Of the above claim(s) 14-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10, 13 and 37 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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**1)** Applicant's detailed and complete response to the rejections made under 35 USC 112, first and second paragraphs, is acknowledged.

**2)** Although specific claims may be discussed in the rejections below, these rejections are also applicable to all other claims in which the noted problems/language occur.

**3)** The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**4)** Claims 1-6, 8-10, 13 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minden et al (US 6,127,134) taken in combination with the admitted prior art as set forth in the specification and further discussed in the Remarks of February 17, 2005.

Minden et al is applied for the reasons set forth in paragraph **11)** of the November 17, 2004 Office action. The admitted prior art is considered to establish that "binding of a target protein within a protein mixture to immobilized receptor, washing away non-binding proteins, and releasing of target protein, are well known in the art" (Remarks of February 17, 2005, page 13, first full paragraph which cites supporting sections of the specification).

As described in paragraph **11)** of the November 17, 2004 Office action, Minden et al describes the covalent binding of a probe comprised of a fluorescent moiety and a functional group to a target protein, the separation of the labeled protein from the sample mixture (by gel electrophoresis) and the detection of the fluorescent label. Minden et al does not describe the use of a fluorescent probe-binding receptor to isolate the targeted protein prior to the detection of the fluorescent label. However, the admitted prior art is considered to establish that "binding of a target protein within a protein mixture to immobilized receptor, washing away non-binding proteins, and releasing of target protein, are well known in the art" (Remarks of February 17, 2005, page 13, first full paragraph which cites supporting sections of the specification). In view of the fact that this receptor binding technique is well known in the art for

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separating proteins, it would be obvious to apply this well known technique to further separate the proteins of Minden et al (i.e. the same field of endeavor), as claimed, with the expectation of improving the protein separation process.

The alleged distinctions that Minden et al "does not use probes specific for "active target proteins"" and that Minden et al "uses probes that will react with a particular amino acid side chain...regardless of the functional state of the protein" are not considered to distinguish from the claimed method for the reason that the "active target proteins" described in paragraph [0032] of the specification clearly include the same proteins described by Minden et al (February 17, 2005 Remarks, page 18). Further, the language of instant claim 1 does not exclude the reaction of the functional group of the fluorescent moiety with an amino acid side chain of the protein nor does it address "the functional state of the protein".

**5)** Claims 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**6)** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary (Molly) E. Ceperley whose telephone number is (571) 272-0813. The examiner can normally be reached from 8 a.m. to 4:30 p.m.

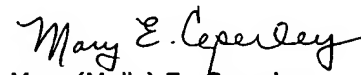
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le, can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 29, 2005

  
Mary (Molly) E. Ceperley  
Primary Examiner  
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